

6.4.10 Minimum Number of EVSE Parking Spaces

A. See Appendix H, Section 11.8 for detailed information regarding Electric Vehicle Supply Equipment (EVSE).

B. In all districts, the minimum number of Electric Vehicle Service Equipment (EVSE) parking spaces shall be provided in accordance with the following tables and apply to new construction of sites with 17 or more parking spaces and to, expansion of parking spaces or significant change in use resulting rehabilitation of existing property with 50 or more parking spaces.

C. The applicant may request to modify and/or defer the number of EV Charging spaces required based on site conditions at the time of the application.

~~**B.** EV Capable Spaces may be installed in addition to the required EV Ready and EV Installed spaces.~~

~~**CD.** Table 6.4.10A defines the generally required EV Installed Spaces, EV Ready or EV Capable Spaces in each site. Tables 6.4.10C10B and DC establish the applicability of Table 6.4.10A~~

~~**E.** EV Capable Spaces may be installed in addition to the required EV Ready and EV Installed spaces.~~ For required EVSE spaces that are not EV Installed Spaces, the applicant may choose EV Ready Spaces or EV Capable Spaces.

~~**D.** Of these EV Ready Spaces, Table 6.4.10A determines the minimum number which shall be EV Installed Spaces.~~

~~**E.** Handicapped Accessible vehicle charging stations shall be provided based on Table 6.4.10B. See Appendix H for information regarding Accessible EV Charging Station design.~~

F. For each five (5) or more EV Installed, EV Ready EV Capable Spaces at a site, the Commission may reduce total required parking by one (1) space.

G. For purposes of EVSE parking spaces and in order to avoid having too many restrictions on a parking space, "Accessible" means a space which meets the dimensional, pavement marking and other requirements of an ADA compliant, van accessible space but it not restricted to handicapped users.

Table 6.4.10A- Level 2 EV Installed, EV Ready or EV Capable Parking Space ~~Wiring~~ Requirements

| <u>Calendar year of site plan application</u> | <u>2012 to 2023</u> | <u>2024 to 2027</u> | <u>2028 and later</u> |
|---|---|---|--|
| <u>Sites with 1 – 16 parking spaces</u> | <u>None required</u> | | |
| <u>A: Total EV Installed Spaces</u> | <u>At least 3% of built and reserve parking spaces, but not less than 2</u> | <u>At least 7% of built and reserve parking spaces, but not less than 2</u> | <u>At least 10% of built and reserve parking spaces, but not less than 2</u> |
| <u>B: EV Ready or EV Capable Spaces</u> | <u>Number needed to bring EV Installed plus EV Ready or EV Capable Spaces to 10% of built and reserve spaces</u> | | <u>None required</u> |
| <u>C: EV Installed in Accessible Spaces</u> | <u>For lots with up to 20 EV Installed plus EV Ready or EV Capable Spaces, at least one of the EV Installed or EV Capable Spaces shall be Accessible but not EV or handicap restricted.</u> | | |
| | <u>For larger installations, at least 5% of EV Installed plus EV Ready or EV Capable Spaces, rounded up to the next whole number, shall be Accessible but not EV restricted.</u> | | |

| | |
|---------------|---|
| | <p><u>For lots with more than one type of EVSE, 5% of EV Installed plus EV Ready Spaces, rounded up to the next whole number, shall be Accessible but not EV restricted for each type. The added Accessible EVSE spaces shall increase “A. Total EV Installed Spaces” so as not to reduce the number of non-accessible EVSE Spaces.</u></p> <p><u>“Type of EVSE” refers to the various connector and capacity standards. A charging station that serves more than one connector type is considered one of each type of EVSE.</u></p> |
| <u>Notes:</u> | <ul style="list-style-type: none"> • <u>Calculation of Accessible Spaces is based on actual EVSE Spaces if the actual exceeds the minimum.</u> • <u>EV Installed in Accessible Spaces is intended to use Accessible Spaces already required by ADA, rather than increasing the number of Accessible Spaces.</u> • <u>For this purpose, Accessible Spaces meet the design requirements (dimensions, marking, ramps, etc.) of handicap restricted accessible spaces. If sufficient ADA complaint restricted spaces are provided elsewhere in the parking areas, the Accessible EVSE spaces are not required to be handicap restricted.</u> • <u>Truck and equipment parking spaces are not included in the above calculation.</u> • <u>See Tables 6.4.10B and 6.4.10C for usage specific details</u> |

| Total Number of Parking Spaces* | Number of Required Level 2 EV Ready or Charging Stations* | EV Ready Spaces installed with EVSE* as a percent of required parking, based on calendar year of site plan application | | |
|--|--|--|--------------|----------------|
| | | 2012 to 2023 | 2024 to 2027 | 2028 and later |
| 1—15 | None required | | | |
| 16 or more | 10 percent of total rounded up to the nearest whole number | 3 percent | 7 percent | 10 percent |
| *Truck and equipment parking spaces are not included in the above calculation. | | | | |

Table 6.4.10B- ADA requirements for EV Charging

| Total Number of EVSE Spaces at Site | Number of EV Spaces required to comply with ADA requirements | |
|--|--|---|
| | Van Accessible Restricted to EV Charging (Note 1) | Van Accessible Restricted to EV Charging and Handicap Parking |
| 1 to 4 | 1 | 0 |
| 5 to 25 | 1 | 1 |
| 26 to 50 | 0 | 2 |
| 51 to 75 | 0 | 3 |
| 76 to 100 | 0 | 4 |
| 101 or more | | 4 plus 1 for each 60 or fraction thereof over 100 |
| <p>Note 1: In order to ensure that all EV users have access to charging equipment if only 1 to 4 EVSE Stations are installed, the van accessible space shall meet the van accessible design requirements, including wheelchair aisle and ramp providing access to EVSE, but not be restricted to handicapped parking, provided sufficient handicapped restricted spaces are provided in accordance with Paragraph 6.4.4.G.</p> | | |

Table 6.4.10C10B- Minimum Required EVSE Parking Spaces- Residential Uses

| Use - RESIDENTIAL | Minimum Required EV Charging Facilities |
|--|---|
| Multi-family Dwellings and Multi-family Dwellings / SAMUD-OZ | <p>See Tables 6.4.10A and 6.4.10B</p> <p>All assigned covered or garage parking spaces shall be provided Level 2 EV Ready circuits and outlets. Remaining parking spaces are used in Tables 6.4.10A and 6.4.10B to determine the shared EV Ready and EV Installed Spaces.</p> <p>MUD management shall contract with an EVSE supplier to provide chargers and means for billing usage to residents.</p> <p>If garages are adjacent to the associated dwelling, connection may be through the dwelling panel and meter.</p> <p><u>To manage site electrical demand</u>, MUD management may require the occupant to purchase or lease approved EVSE <u>and subscribe to the utility's demand management program</u>.</p> |
| Assisted Living | |
| Elderly Housing | |
| Independent Living | |
| Senior Residence Development | |

Table 6.4.10~~CD~~- Minimum Required Parking Spaces- Commercial and Industrial Uses

| Use – COMMERCIAL INDUSTRIAL | Minimum Required Parking Spaces |
|--|---|
| Bar, Nightclub, Lounge | See Tables 6.4.10A and 6.4.10B |
| Bowling Alley | |
| Business Offices | |
| Hotel, Motel, Tourist Home | |
| Hospital, Sanitarium, Convalescent or Nursing Home | |
| Industrial and Manufacturing | |
| Library | |
| Places of Assembly, Amusement, Recreation, and Education | |
| Research | |
| Restaurants, Taverns, Cocktail Lounges | |
| Theater | |
| Park and Ride Lots | See Tables 6.4.10A and 6.4.10B. In addition, all light poles may have EV Level 1 outlets |
| Charging Lots | |
| Municipal Parks and Recreation Areas | None required. Allowed as an accessory use. |
| Retail Stores | Calculation based on employee parking estimated at the time of site plan application. See Tables 6.4.10A and 6.4.10B. Plus one. |
| Car Wash | |
| Fast Food (Small) | |
| Financial Institution | |
| Library | |
| Schools | |
| Medical and Dental Offices | |
| Personal Service Shops | |
| Day Care and Pre-Schools | |
| Warehouse | Calculation based on sum of requirements for various uses therein (e.g. retail stores, restaurants, etc.) with rounding <u>up</u> applied to sum. See Tables 6.4.10A and 6.4.10B. |
| Shopping Center | |
| Church, Synagogue | Recommended. Calculations should consider anticipated parking lot occupancy when religious services are not taking place. See Tables 6.4.10A and 6.4.10B. |

Section 11.8 APPENDIX H

Electric Vehicle Supply Equipment (EVSE)

11.8.1 Purpose

The purpose of this appendix is to provide for and promote the use of Electric Vehicles (EVs) subject to reasonable conditions that will protect the environment, public health, safety, and welfare. Because EV charging requires more time than internal combustion engine (ICE) refueling, charging facilities will be widely distributed to allow vehicle operators to engage in other nearby activities such as home life, shopping, dining or recreation while their EVs are being charged.

11.8.2 Electric Vehicle Definitions

1. **ELECTRIC VEHICLE:** A motor vehicle capable of being driven by a battery powered electric motor.
2. **ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) OR EV CHARGING STATION:** The conductors, including the ungrounded, grounded, and equipment grounding conductors, and the Electric Vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the Electric Vehicle.
 - a. **AC LEVEL 1 EVSE:** 110 to 120 Volt, alternating current (AC) EVSE connected to a 20 Ampere electrical outlet.
 - b. **AC LEVEL 2 EVSE:** 208 to 240 Volt AC EVSE connected to a 40 Ampere circuit.
 - c. **DC FAST CHARGING (DCFC) EVSE:** also known as **LEVEL 3 EVSE:** ~~208-480 Volt~~ Direct current (DC) chargers with 70 Ampere or higher and 208 Volt or higher capacity.
3. **ELECTRIC VEHICLE PARKING SPACES:**
 - a. **EV INSTALLED SPACE:** A designated parking space with Electric Vehicle Supply Equipment (EVSE) installed and operational.
 - b. **EV READY SPACE:** A designated parking space which is provided with electrical panel capacity, breaker space, raceways or conduits, wiring, and junction box to support eventual installation of AC LEVEL 2 or DCFC a minimum AC Level 2 EVSE or higher capacity sufficient to serve DC Rapid Charge EVSE.
 - c. **EV CAPABLE SPACE:** A designated parking space with electrical panel capacity, breaker service space, and raceways or conduits to support eventual installation of AC Level 2 or DCFC EVSE.

11.8.3 Provisions

1. AC Level 1 and AC Level 2 Electric Vehicle Supply Equipment (EVSE) shall be permitted as an accessory use by right in all zoning districts and by Special Exception as primary use. Direct Current Fast Charging (DCFC or Level 3) EVSE are permitted as an accessory use and by Special Exception as primary use in all Commercial and Industrial Zones as defined in Article 4

of these regulations. Site plan approval is required for all uses except single and two-family dwellings.

2. The sale of electric energy through EVSE to the public or to appropriately restricted occupants, guests, customers, members, etc. is permitted in all zones except at single and two-family dwellings. Any access restrictions shall be incorporated in the site plan and approved by the Commission.
3. ~~EVSE connections shall meet one or more of the then current standards designed to be capable of serving available all brands of EVs.~~
 - a. ~~AC Level 2 EVSE should offer the CCS (SAE J1772) and Tesla North American Charging Standard (NACS) Destination or Supercharger protocols and connectors.~~
 - b. ~~As of adoption of this regulation, there are three types of DCFC EVSE connectors, Tesla NACS, CCS, and CHAdeMO. EV chargers often have cords and connectors for more than one type. Adapters may also be available.~~
 - c. Because of ongoing market developments, the applicant is encouraged to work with the Planning Department, Engineering Department, and equipment suppliers to choose the connection type(s) most beneficial to potential users.

~~Propriety EVSE systems capable of serving only specific vehicle brands are permitted where otherwise allowed but may not be used to meet the minimum of EV parking spaces requirements of Section 6.4.10.~~

4. The main electrical switchgear shall be installed with sufficient space and capacity to support 10% of spaces whether EV Installed or EV Ready or EV Capable at 208/240V and 40A per space. In an EV Ready or EV Capable Space, the circuit shall terminate in a suitable termination point such as a receptacle, junction box, or an EVSE, and be located in close proximity to the proposed location of the EV parking spaces.
5. EV Load Management Systems are permitted with shared or publicly accessible Level 2 EVSE, provided a minimum of 20 Amperes are delivered to each connected vehicle.
6. EVSE may be wall or pole mounted. EVSE may be shared among two or more spaces.
7. Signage and parking space paint shall be consistent with applicable standards and shall clearly identify EV Installed Spaces as well as any restrictions regarding users and time limits. Where public or shared access is permitted, rates shall be posted with sufficient size and visibility to be read before entering the parking space. Directional signage leading to EV charging spaces is permitted in addition to any other directional signage.
8. EVSE may include electronic displays that provide advertising, entertainment and other programming ~~provided such displays are not visible from public roadways, residential buildings or sites where residential buildings are permitted.~~
9. Location and safety considerations:
 - a. The EVSEs shall be located in desirable and convenient parking locations that will serve as an incentive for the use of electric vehicles. Placement may consider separate needs of customer and employee parking areas. Appropriate sharing of parking among EV users, ADA users and others should be considered in allocating spaces.
 - b. Electric vehicle charging stations are not permitted within the Town or State right-of-way except at municipal sites and adjacent to designated on-street parking.
 - c. The installation of EVSE shall not reduce the vehicle's parking area dimensions below the size and standards required for parking spaces under Section 6.4.5. This applies to EV

Installed Parking Spaces as well as EV Ready Parking Spaces and EV Capable Parking Spaces.

- d. Equipment shall be protected by wheel stops or concrete-filled bollards. Curbing may be used in lieu of bollards and wheel stops if the charging station is set back a minimum of 24 inches from the face of the curb.
- e. Equipment mounted on pedestals, lighting posts, bollards, or other devices shall be designed and located so as not to impede pedestrian travel or create injury hazards for pedestrians. Equipment added to the site to support the EV Charger installations may be subject to screening requirements depending on the size and location.
- f. Cords shall be retractable or have a place to hang the connector and cord sufficiently above the pedestrian surface. Any cords connecting the charger to a vehicle shall be configured so that they do not cross a driveway, sidewalk, or passenger unloading area.
- g. As established in Section 6.4, enough EV Charging Stations shall meet ADA Handicapped Accessible standards as defined in Paragraph 6.4.4G Handicapped Parking. In addition to the usual requirement for handicapped parking, Accessible EV Charging Stations shall ensure access to equipment and cords. This is illustrated in Figure 11.8A. For purposes of EVSE parking spaces and in order to avoid having too many restrictions on a parking space, "Accessible" means a space which meets the dimensional, pavement marking and other requirements of an ADA compliant, van accessible space but it not restricted to handicapped users.
- h. Electric outlets to support Level 1 charging ~~is~~ are permitted on ~~street~~light poles and walls. They ~~does~~ not require parking restrictions. They do not meet requirements for Level 2 or DCFC EVSE.
- i. Each EV charging space shall have a sign displaying the recognized EV charging symbol - there are slight variations – as shown below. In addition, the signs may contain additional information such as the words, "EV Charging," and information regarding restrictions such as "Not restricted," "Two-hour time limit," "Reserved," "Members only." As noted previously, restrictions are not recommended in publicly available spaces. Pavement shall be marked with either the charging symbol or the letters, "EV".

Typical signs for EV parking spaces include:



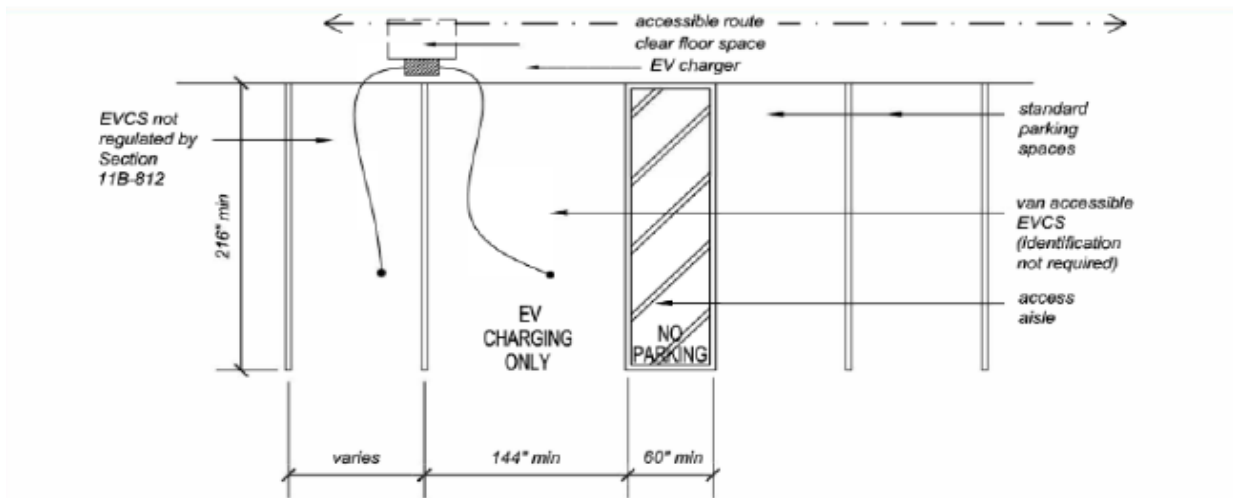
- j. Figure 11.8A illustrates typical arrangement of EV charging and ADA spaces at a site. Figure 11.8B illustrates a typical EV charging station with bollards, designed to serve two spaces. These figures are provided for illustrative purposes only. Applicants should refer to ADA, building code, and other regulations for design of EVSE spaces. To the extent that these zoning regulations do not meet or exceed current building code or ADA requirements, the latter apply.

Section 11.8 APPENDIX H

~~Delete existing Figure 11.8.A—EV Charger Station and Design, including Accessible EV Charging Stations~~



~~Figure 11.8.A Typical Charger Stations showing Van Accessible Spaces. Dimensions should be in accordance with State and ADA Building Codes~~



~~Figure 11.8.B Typical Dual Charger Station showing bollards. Dimensions are illustrative only. Dimensions should be in accordance with State and ADA Building Codes~~